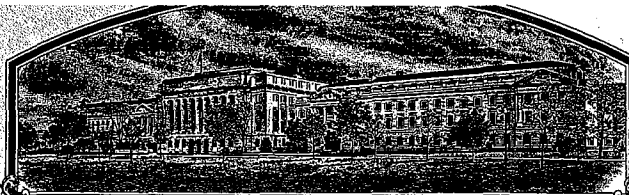


No.

200000296



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

PERALB Genetics Corporation

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

CORN, FIELD

'17QFBI'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this second day of May, in the year two thousand two.

Attest:

Commissioner

Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICEAPPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER DEKALB Genetics Corporation		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME		3. VARIETY NAME 17QFB1	
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 3100 Sycamore Road DeKalb, IL 60115		5. TELEPHONE (include area code) (815) 758-9281		FOR OFFICIAL USE ONLY PVPO NUMBER 200002931	
		6. FAX (include area code) (815) 758-3117		FILING DATE 7-17-00	
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) Corporation		8. IF INCORPORATED, GIVE STATE OF INCORPORATION Delaware		9. DATE OF INCORPORATION June 15, 1988	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers)				FILING AND EXAMINATION FEES: \$ 2450.00 DATE 6-8-02 CERTIFICATION FEE: \$ 320.00 DATE 4/5/02	
11. TELEPHONE (Include area code) (815) 758-9281		12. FAX (Include area code) (815) 758-3117		13. E_MAIL tkain@dekalb.com	
14. CROP KIND (Common Name) Corn		15. GENUS AND SPECIES NAME OF CROP Zea mays		16. FAMILY NAME (Botanical) Gramineae	
17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(a) of the Plant Variety Protection Act <input type="checkbox"/> YES (If "yes", answer items 20 and 21 below) <input checked="" type="checkbox"/> NO (If "no," go to item 22)	
20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO		21. IF "YES" TO ITEM 20, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED		22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U.S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES U.S. February 2000 <input type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)	
23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)		24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF OWNER Timothy R. Kain		SIGNATURE OF OWNER			
NAME (Please print or type) Timothy R. Kain		NAME (Please print or type)			
CAPACITY OR TITLE Patent Scientist		DATE 6/6/00		CAPACITY OR TITLE	
DATE		DATE			

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,450 (\$300 filing fee and \$2,150 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$300 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291

Homepage: <http://www.ams.usda.gov/science/pvp.htm>

ITEM

- 18a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) evidence of uniformity and stability; and (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
- (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
23. See Section 5.5 of the Act for instructions on claiming the benefit of an earlier filing date.

22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

A hybrid produced from this variety was first sold in the United States - February 2000

23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center—East, Beltsville, MD 20705. Telephone: (301) 504-8089.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your letter. Under the PRA of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA Office of Communications at (202) 720-2791. To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call (202) 720-7327 (voice) or (202) 720-1127 (TDD). USDA is an equal opportunity employer.

S&T-470 (6-98) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (03-96) which is obsolete.

2

EXHIBIT A

Origin and Breeding History
17QFB1

17QFB1 was selected for greater combining ability, improved standability and improved testweight

Summer 1992	The inbred line 81BRB1 (a proprietary DEKALB Genetics Corporation inbred) was crossed to RQAA8 (a proprietary DEKALB Genetics Corporation inbred)
Winter 1992-93	S0 seed was grown.
Summer 1993	S1 seed was grown. (nursery book row numbers 93N:17401 to 17440)
Summer 1994	S2 seed was grown ear-to-row (nursery book row numbers 94N:3639 to 94N:3716)
Winter 1994-95	S3 seed was grown ear-to-row (nursery book row numbers 95M:6U:3607 to 95M:6U:3611)
Summer 1996	S4 seed was grown ear-to-row (nursery book row numbers 96N:12279 and 96N:12280)
Winter 1996-97	S5 seed was grown ear-to-row. (nursery book row numbers 97M:HB41/58 and 97M:HB41/59) S4 seed was regrown ear-to-row (nursery book row number 97M:HB41/60)
Summer 1997	S5 and S6 seed was grown ear-to-row (nursery book row numbers 97N:11656 to 97N:11699). Seed from rows 11696 to 11699 was designated 17QFB1.

Statement of Stability and Uniformity

Corn inbred 17QFB1 was coded in 1997 and has been reproduced by self pollination for the past two seasons and judged to be stable. Inbred 17QFB1 is uniform for all traits observed.

Statement of Variants

17QFB1 shows no variants other than what would normally be expected due to environment or that would occur for almost any character during the course of repeated sexual reproduction.

EXHIBIT BStatement of Distinctness

DEKALB Genetics Corporation believes that 17QFB1 is most similar to corn inbred RQAA8, an inbred developed by DEKALB Genetics Corporation.

17QFB1 and RQAA8 differ most significantly in the following traits:

Qualitative Traits:

Trait	17QFB1	RQAA8
Kernel Row Direction	Straight	Curved

SSR Profile of 17QFB1:

LOCUS	17QFB1	RQAA8
BNGL105	092	092
BNGL118	123	123
BNGL149	186	183
BNGL244	145	145
BNGL252	164	164
BNGL426	123	119
BNGL589	175	175
BNGL615	227	231
DUP14	112	112
DUP28	123	123
MC1014	169	169
MC1017	196	196
MC1018	166	138
MC1043	191	175
MC1046	216	216
MC1065	230	230
MC1079	175	182
MC1108	146	146
MC1129	206	206
MC1131	127	127
MC1138	190	194
MC1176	220	254
MC1182	106	106
MC1189	225	225
MC1194	143	177
MC1208	111	111

MC1209	184	184
MC1237	161	161
MC1257	229	229
MC1265	244	244
MC1287	160	160
MC1288	113	120
MC1302	147	147
MC1325	175	175
MC1329	097	107
MC1360	145	145
MC1371	087	124
MC1429	206	206
MC1449	095	160
MC1456	183	187
MC1484	117	117
MC1520	283	275
MC1523	200	200
MC1526	124	120
MC1538	224	225
MC1662	134	165
MC1720	241	241
MC1732	108	108
MC1740	157	155
MC1784	258	262
MC1808	129	129
MC1831	186	186
MC1834	206	208
MC1866	133	133
MC1917	157	109
MC1940	222	222
MC2047	148	145
MC2086	247	240
MC2122	220	220
MC2132	254	254
MC2238	186	186
MC2259	203	203
NC004	156	156
PHI017	105	105
PHI024	171	171
PHI031	194	194
PHI033	257	257
PHI037	141	141
PHI050	092	092
PHI051	147	147
PHI064	104	084
PHI065	148	148
PHI072	149	149
PHI078	132	131
PHI089	093	092
PHI093	299	299

PHI101	102	102
PHI116	181	181
PHI119	168	174

Primers used to detect SSRs are from Celera AgGen, Inc., 1756 Picasso Ave., Davis, CA 95616

Simple Sequence Repeats (SSRs) are genetic markers based on polymorphisms in repeated nucleotide sequences, such as microsatellites. A marker system based on SSRs can be highly informative in linkage analysis relative to other marker systems in that multiple alleles may be present.

Means for performing genetic analysis using SSR polymorphisms are well known in the art. The SSR analysis reported herein were conducted by Celera Ag Gen in Davis, CA. This analysis was carried out by amplification of simple repeats followed by detection of marker genotypes using gel electrophoresis. Markers are scored on the size of the amplified fragment.

The SSR profile of corn inbred 17QFB1 differs from the SSR profile of comparative corn inbred RQAA8 at a number of loci, which are highlighted.

United States Department of Agriculture, Agricultural Marketing Service
Science Division, Plant Variety Protection Office
National Agricultural Library Building, Room 500
Beltsville, MD 20705

OBJECTIVE DESCRIPTION OF VARIETY
CORN (*Zea mays* L.)

Name of Applicant(s) DEKALB Genetics Corporation		Variety Seed Source		Variety Name or Temporary Designation 17QFB1																																																							
Address (Street & No., or R.F.D. No., City, State, Zip Code and Country) 3100 Sycamore Road, DeKalb, IL 60115 U.S.A.				FOR OFFICIAL USE																																																							
				PVPO Number <div style="font-size: 1.2em; font-family: cursive;">2000 0 0296</div>																																																							
Place the appropriate number that describes the varietal characters typical of this inbred variety in the spaces below. Right justify whole numbers by adding leading zeroes if necessary. Completeness should be striven for to establish an adequate variety description. Traits designated by a '*' are considered necessary for an adequate variety description and must be completed.																																																											
<p>COLOR CHOICES (Use in conjunction with Munsell color code to describe all color choices; describe #25 and #26 in Comments section):</p> <table style="width:100%; font-size: 0.8em;"> <tr> <td>01=Light Green</td> <td>06=Pale Yellow</td> <td>11=Pink</td> <td>16=Pale Purple</td> <td>21=Buff</td> </tr> <tr> <td>02=Medium Green</td> <td>07=Yellow</td> <td>12=Light Red</td> <td>17=Purple</td> <td>22=Tan</td> </tr> <tr> <td>03=Dark Green</td> <td>08=Yellow-Orange</td> <td>13=Cherry Red</td> <td>18=Colorless</td> <td>23=Brown</td> </tr> <tr> <td>04=Very Dark Green</td> <td>09=Salmon</td> <td>14=Red</td> <td>19=White</td> <td>24=Bronze</td> </tr> <tr> <td>05=Green-Yellow</td> <td>10=Pink-Orange</td> <td>15=Red & White</td> <td>20=White Capped</td> <td>25=Variegated (Describe)</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>26=Other (Describe)</td> </tr> </table>						01=Light Green	06=Pale Yellow	11=Pink	16=Pale Purple	21=Buff	02=Medium Green	07=Yellow	12=Light Red	17=Purple	22=Tan	03=Dark Green	08=Yellow-Orange	13=Cherry Red	18=Colorless	23=Brown	04=Very Dark Green	09=Salmon	14=Red	19=White	24=Bronze	05=Green-Yellow	10=Pink-Orange	15=Red & White	20=White Capped	25=Variegated (Describe)					26=Other (Describe)																								
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<p>1. TYPE: (describe intermediate types in Comments section)</p> <p>* 2 1=Sweet 2=Dent 3=Flint 4=Flour 5=Pop 6=Ornamental 7=Pipecorn</p>				<p>Standard Inbred Name A619</p> <p>2</p>																																																							
<p>2. REGION WHERE DEVELOPED IN THE U.S.A.:</p> <p>* 2 1=Northwest 2=Northcentral 3=Northeast 4=Southeast 5=Southcentral</p> <p>6=Southwest 7=Other _____</p>				<p>Standard Seed Source NCRIPS_</p> <p>2</p>																																																							
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- - -	- - - .	From 10% to 90% pollen shed																																																									
(*) - - -	- - - .	From 50% silk to optimum edible quality																																																									
- - -	- - - .	From 50% silk to harvest at 25% moisture																																																									
DAYS		HEAT UNITS																																																									
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<p>4. PLANT:</p> <table style="width:100%; font-size: 0.8em;"> <thead> <tr> <th></th> <th>Standard Deviation</th> <th>Sample Size</th> <th></th> <th>Standard Deviation</th> <th>Sample Size</th> </tr> </thead> <tbody> <tr> <td>* 2 0 9.8 cm Plant Height (to tassel tip)</td> <td>2.4</td> <td>60</td> <td>1 7 6.7</td> <td>13.352</td> <td>120</td> </tr> <tr> <td>* 0 3 2.3 0 6 1.3 cm Ear Height (to base of top ear node)</td> <td>4.5 11.8</td> <td>60</td> <td>0 3 9.3</td> <td>6.853</td> <td>120</td> </tr> <tr> <td>0 1 4.1 cm Length of Top Ear Internode</td> <td>0.7</td> <td>60</td> <td>0 1 1.8</td> <td>2.507</td> <td>120</td> </tr> <tr> <td colspan="6" style="text-align: center;">Average Number of Tillers</td> </tr> <tr> <td>* 1.0 Average Number of Ears per Stalk</td> <td>0.0</td> <td>60</td> <td>0 0 1.0</td> <td>0.000</td> <td>120</td> </tr> <tr> <td colspan="6">1 Anthocyanin of Brace Roots: 1=Absent 2=Faint 3=Moderate 4=Dark</td> </tr> </tbody> </table>					Standard Deviation	Sample Size		Standard Deviation	Sample Size	* 2 0 9.8 cm Plant Height (to tassel tip)	2.4	60	1 7 6.7	13.352	120	* 0 3 2.3 0 6 1.3 cm Ear Height (to base of top ear node)	4.5 11.8	60	0 3 9.3	6.853	120	0 1 4.1 cm Length of Top Ear Internode	0.7	60	0 1 1.8	2.507	120	Average Number of Tillers						* 1.0 Average Number of Ears per Stalk	0.0	60	0 0 1.0	0.000	120	1 Anthocyanin of Brace Roots: 1=Absent 2=Faint 3=Moderate 4=Dark																			
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Application Variety Data				Standard Inbred Data																																																							

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Application Variety Data				Page 2	Standard Inbred Data					
5. LEAF:				Standard Deviation	Sample Size	Standard Deviation		Sample Size		
*	0	0	9. 9 cm Width of Ear Node Leaf	0.6	60	0	0	8. 9	0.419	120
*	0	7	8. 4 cm Length of Ear Node Leaf	3.6	60	0	6	4. 2	3.944	120
*			6. 6 Number of leaves above top ear	0.7	30	5.	4		0.392	50
	2		9. 2 degrees Leaf Angle (measure from 2nd leaf above ear at anthesis to stalk above leaf)	5.5	60	2	8.	5	8.313	100
*	0	3	Leaf Color (Munsell code 5 GY ¾)			0	3	(Munsell code 5 GY ¾)		
			5 Leaf Sheath Pubescence(Rate on scale from 1=none to 9=peach fuzz)			1				
			5 Marginal Waves (Rate on scale from 1=none to 9=many)			5				
			6 Longitudinal Creases (Rate on scale from 1=none to 9=many)			8				
6. TASSEL:				Standard Deviation	Sample Size	Standard Deviation		Sample Size		
*	0	1.	7 Number of Primary Lateral Branches	0.4	60	8.	4		1.804	120
	3	2.	3 Branch Angle from Central Spike	11.8	60	2	8.	4	3.766	100
*	4	1.	6 cm Tassel Length (from top leaf collar to tassel tip)	3.9	60	3	6.	1	4.928	120
		4.	5 Pollen Shed (Rate on scale from 0=male sterile to 9=heavy shed)			4.	8			
	0	5	Anther Color (Munsell code 2.5 GY 8/6)			0	5	(Munsell code 2.5 GY 8/6)		
	0	2	Glume Color (Munsell code 5 GY 4/8)			0	2	(Munsell code 5 GY 4/8)		
		1	Bar Glumes (Glume Bands): 1=Absent 2=Present			1				
7a. EAR (Unhusked Data):						0		5	(Munsell code 2.5 GY 8/6)	
*	0	5	Silk Color (3 days after emergence) (Munsell code 2.5 GY 8/6)			0		2	(Munsell code 5 GY 4/8)	
	0	2	Fresh Husk Color (25 days after 50% silking) (Munsell code 5 GY 4/8)			2		1	(Munsell code 2.5 Y 8/4)	
	2	1	Dry Husk Color (65 days after 50% Silking) (Munsell code 2.5 Y 8/4)			1				
*		1	Position of Ear at Dry Husk Stage: 1=Upright 2=Horizontal 3=Pendent			6				
		5	Husk Tightness (Rate on scale from 1=very loose to 9=very tight)			1				
		1	Husk Extension (at harvest): 1=Short (ears exposed) 2=Medium (<8 cm) 3=Long (8-10 cm beyond ear tip) 4=Very Long (>10 cm)							
7b. EAR (Husked Ear Data):				Standard Deviation	Sample Size	Standard Deviation		Sample Size		
*	1	6.	9 cm Ear Length	0.8	60	1	3.	9	1.111	60
*	3	9.	0 mm Ear Diameter at mid-point	0.1	60	4	4.	3	1.874	60
	1	4	5. 9 gm Ear Weight	10.9	40	0	9	3.	1	12.002
*		1	6 Number of Kernel Rows	0.4	60	1	5		0.575	60
		2	Kernel Rows: 1=Indistinct 2=Distinct			2				
		1	Row Alignment: 1=Straight 2=Slightly Curved 3=Spiral			1				
	0	9.	5 cm Shank Length	2.9	60	1	3.	0	0.937	120
		2	Ear Taper: 1=Slight 2=Average 3=Extreme			2				
Application Variety Data				Standard Inbred Data						
Note: Use chart on first page to choose color codes for color traits.										

Application Variety Data			Page 3	Standard Inbred Data		
8. KERNEL (Dried):			Standard Deviation	Sample Size	Standard Deviation Sample Size	
1	0.7 mm Kernel Length		0.6	60	1	0.6 0.983 60
0	7.5 mm Kernel Width		0.3	60	0	8.2 0.754 60
0	4.5 mm Kernel Thickness		0.3	60	0	3.9 0.438 60
2	2.5 % Round Kernels (Shape Grade)			500g	3	7.7 500g
1 Aleurone Color Pattern: 1=Homozygous 2=Segregating					1	
(*)	1	9 Aleurone Color (Munsell code Lighter than 2.5 Y 9/2)			1	9 (Munsell code Lighter Than 2.5 Y 9/2)
*	0	7 Hard Endosperm Color (Munsell code 2.5 Y 8/10)			0	7 (Munsell code 2.5 Y 8/10)
*	0	3 Endosperm Type: 1=Sweet (sul) 2=Extra Sweet (sh2) 3=Normal Starch 4=High Amylose Starch 5=Waxy Starch 6=High Protein 7=High Lysine 8=Super Sweet (se) 9=High Oil 10=Other			0	3
2	4.6 gm Weight per 100 Kernels (unsized sample)		3.3	600 seeds	2	6.8 3.808 1200 seeds
9. COB:			Standard Deviation	Sample Size	Standard Deviation Sample Size	
*	2	2.0 mm Cob Diameter at mid-point	0.2	60	2	6.5 1.022 60
	1	9 Cob Color (Munsell code Lighter Than 5 Y 9/1)			1	9 (Munsell code Lighter Than 5 Y 9/1)
10. DISEASE RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant); leave blank if not tested; leave Race or Strain Options blank if polygenic):						
A. Leaf Blights, Wilts, and Local Infection Diseases						
5 Anthracnose Leaf Blight (<i>Colletotrichum graminicola</i>)					7	
_ Common Rust (<i>Puccinia sorghi</i>)					_	
_ Common Smut (<i>Ustilago maydis</i>)					_	
7 Eyespot (<i>Kabatiella zeae</i>)					6	
7 Goss's Wilt (<i>Clavibacter michiganense</i> spp. <i>Nebraskense</i>)					6	
5 Gray Leaf Spot (<i>Cercospora zeae-maydis</i>)					4	
8 Helminthosporium Leaf Spot (<i>Bipolaris zeicola</i>) Race 2					9 Race 2	
6 Northern Leaf Blight (<i>Exserohilum turcicum</i>) Race 2					4 Race 2	
8 Southern Leaf Blight (<i>Bipolaris maydis</i>) Race 0					7 Race 0	
_ Southern Rust (<i>Puccinia polysora</i>)					_	
4 Stewart's Wilt (<i>Erwinia stewartii</i>)					_	
_ Other (Specify) _____					_	
B. Systemic Diseases						
2 Corn Lethal Necrosis (MCMV and MDMV)					4	
_ Head Smut (<i>Sphacelotheca reiliana</i>)					7	
_ Maize Chlorotic Dwarf Virus (MCDV)					_	
_ Maize Chlorotic Mottle Virus (MCMV)					_	
_ Maize Dwarf Mosaic Virus (MDMV) Strain _____					_ Strain _____	
_ Sorghum Downy Mildew of Corn (<i>Peronosclerospora sorghi</i>)					_	
_ Other (Specify) _____					_	
C. Stalk Rots						
_ Anthracnose Stalk Rot (<i>Colletotrichum graminicola</i>)					_	
_ Diplodia Stalk Rot (<i>Stenocarpella maydis</i>)					_	
_ Fusarium Stalk Rot (<i>Fusarium moniliforme</i>)					_	
_ Gibberella Stalk Rot (<i>Gibberella zeae</i>)					_	
_ Other (Specify) _____					_	
D. Ear and Kernel Rots						
_ Aspergillus Ear and Kernel Rot (<i>Aspergillus flavus</i>)					_	
_ Diplodia Ear Rot (<i>Stenocarpella maydis</i>)					_	
_ Fusarium Ear and Kernel Rot (<i>Fusarium moniliforme</i>)					_	
_ Gibberella Ear Rot (<i>Gibberella zeae</i>)					_	
_ Other (Specify) _____					_	
Application Variety Data				Standard Inbred Data		
Note: Use chart on first page to choose color codes for color traits.						

Application Variety Data	Page 4	Standard Inbred Data			
11. INSECT RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant); leave blank if not tested):					
- Banks Grass Mite (<i>Oligonychus pratensis</i>) - Corn Earworm (<i>Helicoverpa zea</i>) - Leaf-Feeding - Silk Feeding : mg larval wt. - Ear Damage - Corn Leaf Aphid (<i>Rhopalosiphum maidis</i>) - Corn Sap Beetle (<i>Carpophilus dimidiatus</i>) - European Corn Borer (<i>Ostrinia nubilalis</i>) 1st Generation (Typically Whorl Leaf Feeding) 2nd Generation (Typically Leaf Sheath-Collar Feeding) - Stalk Tunneling : cm tunneled/plant - Fall Armyworm (<i>Spodoptera frugiperda</i>) - Leaf-Feeding - Silk-Feeding : mg larval wt. - Maize Weevil (<i>Sitophilus zeamais</i>) - Northern Rootworm (<i>Diabrotica barberi</i>) - Southern Rootworm (<i>Diabrotica undecimpunctata</i>) - Southwestern Corn Borer (<i>Diatraea grandiosella</i>) - Leaf Feeding - Stalk Tunneling : cm tunneled/plant - Two-spotted Spider Mite (<i>Tetranychus urticae</i>) - Western Rootworm (<i>Diabrotica virgifera virgifera</i>) - Other (Specify)	Standard Deviation	Sample Size	Standard Deviation	Sample Size	
12. AGRONOMIC TRAITS:					
4 Stay Green (at 65 days after anthesis) (Rate on a scale from 1=worst to 9=excellent.)				2	
0 0. 0 % Dropped Ears (at 65 days after anthesis)				0 0. 0	
0 0. 0 % Pre-anthesis Brittle Snapping				0 0. 0	
0 0. 0 % Pre-anthesis Root Lodging				0 0. 0	
0 1. 9 % Post-anthesis Root Lodging (at 65 days after anthesis)				0 3. 2	
4 2 0 4. 4 Kg/ha Yield of Inbred Per Se (at 12-13% grain moisture)				2 6 6 3. 7	
13. MOLECULAR MARKERS: (0=data unavailable; 1=data available but not supplied; 2=data supplied)					
1 Isozymes 1 RFLP's 0 RAPD's					
REFERENCES:					
Butler, D.R. 1954. A System for the Classification of Corn Inbred Lines. PhD Thesis, Ohio State University. Emerson, R.A., G.W. Beadle, and A.C. Fraser. 1935. A Summary of Linkage Studies in Maize. Cornell A.E.S., Mem. 180. Farr, D.F., G.F. Bills, G.P. Chamuris, A.Y. Rossman. 1989. Fungi on Plant and Plant Products in the United States. The American Phytopathological Society, St. Paul, MN. Inglett, G.E. (Ed.) 1970. Corn: Culture, Processing, Products. Avi Publishing Company, Westport, CT. Jugenheimer, R.W. 1976. Corn: Improvement, Seed Production, and Uses. John Wiley & Sons, New York. McGee, D.C. 1988. Maize Diseases. APS Press, St. Paul, MN. 150 pp. Munsell Color Chart for Plant Tissues. Macbeth. P.O. Box 230. Newburgh, N.Y. 12551-0230 The Mutants of Maize. 1968. Crop Science Society of America. Madison, WI. Shurtleff, M.C. 1980. Compendium of Corn Diseases. APS Press, St. Paul, MN. 105 pp. Sprague, G.F., and J.W. Dudley (Editors). 1988. Corn and Corn Improvement, Third Edition. Agronomy Monograph 18. ASA, CSSA, SSSA, Madison, WI. Stringfield, G.H. Maize Inbred Lines of Ohio. Ohio A.E.S., Bul. 831. 1959. U.S. Department of Agriculture. 1936, 1937. Yearbook.					
COMMENTS (eg. state how heat units were calculated, standard inbred seed source, and/or where data was collected. Continue in Exhibit D):					
Heat Unit Calculation: $\text{GDU} = \frac{\text{Daily Max Temp } (<=86^{\circ}\text{F}) + \text{Daily Min Temp } (>=50^{\circ}\text{F})}{2} - 50^{\circ}\text{F}$					

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) DEKALB Genetics Corporation	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME 17QFB1
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) 3100 Sycamore Road DeKalb, IL 60115 U.S.A.	5. TELEPHONE (include area code) (815) 758-9281	6. FAX (include area code) (815) 758-3117
7. PVPO NUMBER		

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain. ☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company? ☒ YES ☐ NO
If no, give name of country

10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)?
☐ YES ☐ NO If no, give name of country

b. If original rights to variety were owned by a company(ies), is(are) the original owner(s) a U.S. based company?
☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (if needed, use reverse for extra space):

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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